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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,484	04/17/2001	Lisette Cooper	11910-003001	8521
26161 7590 03/12/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER CHENCINSKI, SIEGFRIED E	
			ART UNIT	PAPER NUMBER
			3692	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/836,484

Applicant(s)

COOPER ET AL.

Examiner

Siegfried E. Chencinski

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-18, 22, 23 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-18, 22, 23 & 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 14-18, 22, 23 & 28 are rejected under 35 U.S.C. 103(a) as being disclosed by Gatto (US PreGrant Publication 2003/0065601 A1) in view of Applicant disclosed prior art (hereafter AAPA), Official Notice, Microsoft Excel ® 5 Training Book (hereafter Excel) and Jones et al. (US Patent 6,021,397).

Re. Claims 14-18, 22, 23 & 28, Gatto, Jones, Makivic, Official Notice, AAPA, Morningstar.com, E*Trade collectively disclose a wide variety of computer automatic graphic display of a variety of data output from mathematical algorithms related to financial security market calculations regarding historical and projected data. Excel discloses one example of many general capabilities of off the shelf office software for graphically displaying data outputs of mathematical algorithms in many formats and geometric shapes with many notation capabilities. However, none of Gatto, Jones, Makivic, Official Notice, AAPA, Morningstar.com, E*Trade or Excel explicitly disclose the exact method for use in a visualization system comprising the steps of:

Re. Claims 14 & 28,

- (a) generating data representing a trend line as a function of a provided performance measure at a succession of times prior to a date;
- (b) generating data representing at least one stripe, each stripe indicating odds of the performance measure being within displayed a corresponding range of potential values of the performance measure at a succession of times in the future;

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- (c) each stripe beginning at the end of the trend line and becoming broader as it extends to times later than the date;
- (d) a boundary of each stripe varying as a function of time according to variations in the odds of the performance measure being within the range represented by the stripe as determined by an algorithm capable of producing predicted probability distributions; and
- (e) displaying the trend line and the stripes in the visualization system.

Re. Claim 15, in which the performance measure comprises a price of the asset.

Re. Claim 16, in which the performance measure comprises a return percentage.

Re. Claim 17, in which the performance measure comprises a tax-adjusted return percentage.

Re. Claim 18, in which generating data includes generating data representing two or more stripes each representing a different range of potential values of the performance measure, and displaying includes displaying each of the two or more stripes.

Re. Claim 22, in which each stripe includes two portions, one of the portions representing the odds prior to a second date based on one assumption, the other of the portions representing the odds after the second date based on another assumption.

Re. Claim 23, in which the second date is a date on which tax effects change from the one assumption to the other assumption.

Applicant states that claim 14 is exemplary of claim 28 (REMARKS submitted June 15, 2006, p. 8, ll. 32-33).

The Office Actions dated March 9, 2006 and September 9, 2005 established on the record the disclosures of Gatto, Jones, Makivic, Official Notice, AAPA (such as that of Morningstar.com and E*Trade) that the above mentioned computer automated graphic displays of quantitative data displays of various algorithms were in widespread use in the financial securities industry.

The use of graphic displays of data was old, well known and a ubiquitous phenomenon at the time of applicant's invention. The computer revolution automated the art of graphic displays and put it on the computer screen and on computer printouts, first in a single color contrast on a background color (e.g. white on a dark grayish or black background), and then in a multiplicity of colors on a background of the user's choice. Some of the dramatic examples of this computer automation revolution are CAD/CAM, maps, computer animation, and the computer displays of tables, charts and graphs in all kinds of shapes, virtually any known geometric shape and other hand drawn shapes as well. The most well known softwares which came into the market place in the 1980's for the graphic and geometric display of data were Lotus123, Lotus Notes, Harvard Graphics, Excel and Adobe, among many others, along with other off the shelf and custom software systems. Several of these software systems have automated the process of creating basic free form mathematically related graphics and general art on a computer screen available in relatively inexpensive off the shelf packages to be run on the ordinary desk top or laptop PC. Applicant is referred to select pages of an independent EXCEL ® 5 training book as an example of what one of the simpler off the shelf software packages was capable of prior to Applicant's invention directly related to Applicant's invention. The ordinary practitioner of the art would have been familiar with these capabilities at the time of Applicant's invention and also would have known that off the shelf and custom softwares were capable of all of the graphic display features in Applicant's invention. The ordinary practitioner also would have known that widespread use was being made in the financial arts of these very handy computer automated graphic displays of quantitative information of every kind being used by office, accounting, financial and investment clerks, financial managers, financial traders, investors of every level of sophistication and PhD academics in the financial arts alike.

Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have found it as obvious to have combined the disclosures of Gatto with the art of Jones, Makivic, Official Notice, AAPA (such as that of

Morningstar.com and E*Trade) and Excel in order to produce a method for use in a visualization system comprising the steps of the above stated limitations of claims 14-18, 22, 23 & 28. The practitioner's motivation would have been based on the desire to provide users with improved tools for effectively viewing historical estimates, analytical projections and recommendations regarding financial assets such as securities (Gatto, [0008]).

Response to Arguments

2. Applicant's arguments filed on December 28, 2006 with respect to claims 14-18, 22, 23 & 28 have been fully considered but they are not persuasive.

ARGUMENT:

- (1) The examiner fails even to *allege* that all elements of the claims are disclosed by the prior art, and has thus failed to make out a prima facie case of obviousness (p. 4, ll. 20-21).
- (2) Not one reference cited by the examiner discloses (the) element of (claim 14) of "a boundary of each stripe varying as a function of time according to variations in the odds of the performance measure being within the range represented by the stripe" (p. 4, ll. 22-24).
- (3) '... the examiner's purported motivation to combine the references, "the desire to provide users with improved tools for effectively viewing historical estimates, analytical projections and recommendations regarding financial assets such as securities" (Gatto, [0008]) is merely a motivation to improve the art, something which always exists, not a motivation to make any specific improvement in a way that produces the claimed method' (p. 5, ll.).

RESPONSE:

A. Applicant is reminded of the bar established for rebutting an examiner's case of obviousness by reference to the following two court opinions:

- (1) One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed.

Cir. 1986).

(2) “[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency’ under 35 U.S.C. 102, on prima facie obviousness’ under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted].” The burden of proof is similar to that required with respect to product-by-process claims. *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).” (MPEP § 2112.01).

B. Further, the guidelines for a *prima facie* case of obviousness were reasserted in the federal circuit court’s decision of *In re. Kahn* in March 2006, as follows:

“A suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. . . . The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000). However, rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *See Lee*, 277 F.3d at 1343-46; *Rouffett*, 149 F.3d at 1355-59. This requirement is as much rooted in the Administrative Procedure Act, which ensures due process and non-arbitrary decision making, as it is in § 103. *See id.* at 1344-45.” *In re Kahn*, Slip Op. 04-1616, page 9 (Fed. Cir. Mar. 22, 2006).

C. In this case, the examiner provided a detailed review of the extensive prior art which had been available to the ordinary practitioner for displaying data in graphic form. As affirmed in *In re Kahn* above, a *prima facie* case of obviousness rejection can contain numerous elements which do not necessarily have to be disclosed in the prior art of record. The examiner has met the standard reaffirmed in *In re Kahn* by having provided articulated reasoning with some rational underpinning to support the legal

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conclusion of obviousness. This is a matter which is always application specific. Further, Applicant has failed to prove that the prima facie case presented by the examiner does not necessarily or inherently possess the characteristics of his [or her] claimed invention. Applicant has merely stated that a specific limitation describing one form of graphic display was not specifically presented by the examiner through a prior art document. Applicant has failed to show that "a boundary of each stripe varying as a function of time according to variations in the odds of the performance measure being within the range represented by the stripe" fails to fall within the boundaries of the examiner's extensive articulated reasoning.

D. Regarding Applicant's argument stating that the examiner's motivation statement is somehow inadequate or inappropriate, MPEP 2143.01, I. cites the following case law guidance for the examiner's identifying motivation for the ordinary practitioner to combine teachings from a plurality of references:

(1) "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art."

(2) "The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant (underlining added). In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

(3) 'Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art (underlining added)." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)'.

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(4) In this case, the examiner repeats above the rejection statement contained in the last Office Action and repeated above is "The practitioner's motivation would have been based on the desire to provide users with improved tools for effectively viewing historical estimates, analytical projections and recommendations regarding financial assets such as securities (Gatto, [0008])". This statement is drawn from the motivations expressed in one of the prior arts of record in this case. The motivation meets the guidelines established by the court opinions cited above.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Richard E. Chilcot, can be reached on (571) 272-6777.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington D.C. 20231

or (571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

or (571) 273-6792 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC

February 26, 2006


FRANTZY POINVIL
PRIMARY EXAMINER

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